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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,525	10/06/2003	William B. Rottenberg	4072-030	2524
29797	7590	07/27/2006		
JOHN RICHARD MERKLING 11171 WEST EXPOSITION DRIVE LAKEWOOD, CO 80226-3867			EXAMINER MANUEL, GEORGE C	
			ART UNIT 3762	PAPER NUMBER

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,525	ROTTENBERG, WILLIAM B.	
	Examiner	Art Unit	
	George Manuel	3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 3-10 and 12-19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/6/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 11 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duggan (U.S. Pat. 5,318,593).

Regarding claims 1, 2 and 11, Duggan discloses switch 106a' as part of a multiplexer 106. Fig. 3A shows a ventricular sense amplifier 139. Shown in the figure are a plurality of resistors and capacitors, Rv, Cv and R1, C1. The multiplex switch 106a' is disclosed as being implemented by the select switch 130 and the point of interconnection between the resistor R2 and R1 is coupled to the ground via the capacitor C2. One of ordinary skill in the art would have found it obvious to provide a plurality of double throw switches in place of the switch 106a' and 130a, c because the double throw feature is an equivalent position selection to multiplexing.

Regarding claims 20-24, one of ordinary skill in the art would have found it obvious to modify the Duggan reference to provide a plurality of sense amplifiers having a plurality of inputs and a plurality of electrodes because Duggan teaches it is contemplated that a plurality of electrodes each coupled to an amplifier 134 and a select switch 130 may be coupled to a corresponding number of selected sites of a patient's heart.

Allowable Subject Matter

Claims 3-10 and 12-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

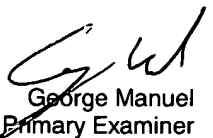
The following is a statement of reasons for the indication of allowable subject matter: Feedback capacitors connected between an output of the operational amplifier and an inverting input as claimed does not appear to be shown nor suggested by the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arnett et al (U.S. Pat. 4,068,217) discloses sense amplifiers 37, 38, 39, and 40 that are connected to switches 41, 42, 43, and 44 where each switch is a three-position switch.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Manuel whose telephone number is (571) 272-4952.



George Manuel
Primary Examiner
Art Unit: 3762

7/18/06